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ABSTRACT

The purpose of the study reported in this paper was to determine if relationships existed between characteristics of agricultural science teachers and of their current programs and the perceptions of teachers toward proposed changes in agricultural science curricula in Texas. An ex post facto research design was used. The study surveyed 933 teachers attending the opening meeting of the State Professional Improvement Conference for Teachers of Agricultural Science. The questionnaire included one part on which teachers responded on a Likert-type scale to questions concerning the proposed changes, another part that collected personal data, and two questions concerning teachers' ultimate adoption or rejection of the new curriculum. Experience was negatively related to teachers' perceptions of the effects of the new curriculum on enrollment, supervised occupational experience programs, and Future Farmers of America. The number of schools in which the teachers had worked was negatively related to teachers' perceptions toward all aspects of the proposed curricular change. The teacher's perception toward the change process was the single best predictor of the teacher's free choice and actual decision concerning adoption of the change. Teacher input and involvement in the change process were recommended. (Six data tables are appended.) (YLB)

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PERCEPTIONS OF SECONDARY AGRICULTURAL SCIENCE TEACHERS TOWARD PROPOSED CHANGES IN AGRICULTURAL CURRICULA IN TEXAS

Richard J. Norris and Gary E. Briers

Vocational agriculture has witnessed several changes in the industry it serves since the passage of the Smith-Hughes Act in 1917. However, at no time in history has change in agriculture been more rapid than it is now. Agriculture is in the midst of a technological revolution which promises to bring drastic changes. Coupled with technological advancements, economic problems have plagued farmers during the past decade, forcing many to abandon production agriculture. Burton (1986) stated that less than 3 percent of today's labor force are farmers, but more than 20 percent of U.S. workers are employed in agriculturally related careers. So, the production agriculture emphasis of the first half century of vocational agriculture may not be relevant today.

Another challenge facing vocational agriculture has come about as a result of the "back to the basics" movement, epitomized by A Nation at Risk (The National Commission on Excellence in Education, 1983). This report called for stricter graduation requirements, emphasizing additional English, mathematics, science, and foreign language studies. School curricula across the nation have been changed to reflect the recommendations of this report.

What does all this mean for vocational agriculture? Students enrolled in the program may have difficulty obtaining a career in production agriculture; instead, they may need to look to agribusiness for employment. Because of the increasing number of required courses for high school graduation, students often must omit vocational agriculture. Enrollment in vocational agriculture nationwide has dropped at an alarming rate during the past decade--from 695,850 in 1975-76 to 525,071 in 1985-86 (National FFA Organization, 1986). Eudy (1986) cited these data as a mandate for changes in vocational agriculture if the program is to

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survive. The State Board of Education in Texas were critical of vocational agriculture in light of these facts. Ratliff-Reuwer (1987) reported that "an ultimatum was handed down to the Agricultural Education Division of the Texas Education Agency: Either do something to 'fix' the program, or it will be done for you" (p. 8).

Agricultural educators in Texas began to restructure Production Agriculture I, II, III, and IV courses (Texas Education Agency, 1968) into semester courses (Texas Education Agency, 1987a), which allow the student to specialize in one area of agriculture or to gain a wide range of experiences. The semester courses de-emphasized production agriculture, while increasing instruction in agribusiness and emerging technologies in agriculture. The major questions then were, "How do the instructors, perhaps not directly involved with the change process, view the proposed changes? Do they see the need for change? Are the changes viewed as threatening?"

Change is an aspect of life that all individuals face. Rarely does change from a familiar means of operation occur without resistance and, in some cases, open rebellion. Morgan (1972) stated that an organization needs change when it has displayed one or more of the following characteristics:

1. Ineffective operations
2. Unbalanced growth
3. Obsolescence
4. Inflexibility
5. Vague or conflicting goals
6. Lack of tempo
7. Incapacity for renewal (pp. 141-146)

Morgan also listed what he considered to be four good benefits from an organization's attempt to bring about change. Changes may cause organizations:

1. to operate more effectively.
2. to achieve balanced growth.
3. to keep up with the times.
4. to be more flexible. (pp. 133-134)

Whenever change is considered, one should ask are there times when resistance to change might be more common, and even predictable? Bennis, Beene, and Chin (1976) identified six instances in which resistence to change could be predicted:

> (a) if the nature of the change is not made clear to the people who are going to be influenced by the change, (b) when different people will see different meanings in the proposed change, (c) when those influenced are caught in a jam between strong forces pushing them to make the change and strong forces deterring them [from] making the change, (d) to the degree that the persons influenced by the change have pressure put upon them to make it, and will be decreased to the degree that these same persons are able to have some "say" in the nature or direction of the change, (e) if the change is made on personal grounds rather than impersonal requirements or sanctions, and (f) if the change ignores the already established institutions in the group. (pp. 544-546)

When change is needed, it is important to gain acceptance from those affected as quickly and efficiently as possible and to know why a person adopts a change. George and Rutherford (1978) determined that adoption of an innovation could be predicted based on the individual's concerns about it. The more concerned about the change or innovation, the higher the chance that the individual will choose to adopt rather than reject. Pierce (1981) cited age, education level, and support of administration as being major influencing factors affecting a teacher's acceptance or rejection of innovative practices. He found that younger teachers, those with higher levels of education, and those whose administration exhibited support for the innovation were more likely to adopt change and innovations.

The literature suggested, then, that adoption or rejection of proposed change can be predicted. Is this true for proposed changes in agricultural science curricula in Texas?

PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of the study was to determine if relationships existed between characteristics of agricultural science teachers and of their current programs, and the perceptions of teachers toward proposed changes in agricultural science curricula in Texas. The objectives were as follows:

1. To determine if relationships existed between teacher/program characteristics and teachers' perceptions of proposed curricular changes.

2. To determine if relationships existed among perceived effects of curricular changes, teachers' "free choice" decision to change their programs, and their "actual decision" to change their programs.

METHODOLOGY

To accomplish the objectives of this study, an ex post facto research design was employed. This design was used both to describe the present situation and to help in explaining why the situation existed (Borg & Gall, 1983).

Source of the Data

Because the study dealt with current changes in curricula of agricultural science programs in Texas, the population for the study consisted of 1,415 secondary teachers of agricultural science in 1987-88 (Texas Education Agency, 1987b). The study was conducted by surveying 933 teachers in attendance at the opening meeting of the State Professional Improvement Conference for Teachers of Agricultural Science, August 12, 1987, Houston, Texas (Krejcie & Morgan, 1970). Responses were anonymous; therefore, it was impossible to survey the non-respondents as they were unidentifiable. This should be recognized as a necessary limitation of the study.

Instrumentation

The questionnaire used for this study consisted of three parts (Norris, 1988). In part one of the questionnaire, teachers responded to 35 statements, indicating the extent to which they agreed or disagreed with each statement. A five-point, Likert-type response scale was employed for measurement purposes (Likert, 1932; Edwards, 1957), with "1"=strongly disagree, "2"=disagree, "3"=neither agree nor disagree, "4"=agree, and "5"=strongly agree. Because survey items were written positively, the scale was interpreted such that an answer of "1" indicated strong

"negative" perceptions and an answer of "5" indicated strong "positive" perceptions, with "3" being "neutral." Twenty-six of the 35 statements suggested possible effects of curricular changes on the program of vocational agriculture. Nine statements elicited the opinions of teachers concerning the methods used to bring about the change. Conceptually, items were grouped into six major "concerns" in agricultural science and one concern dealing with the change process employed. The individual items and scales were developed and validated by four faculty members and six graduate students in the Department of Agricultural Education. Then, responses to individual items (as grouped conceptually) were summed to develop the seven scales labeled as follows: Perceptions of teachers regarding effects of curricular changes on (a) enrollment in agricultural science, (b) non-vocationally oriented students, (c) FFA, (d) SOEP, (e) program administration, and (f) teacher inservice needs. Perceptions of teachers regarding the methods used to bring about the changes in curricula comprised the seventh scale.

A measure of internal consistency (Cronbach's coefficient alpha) was computed to assess scaling procedures (Cronbach, Gleser, Nanda, & Rajaratnan, 1972; Heimgarter & Foster, 1981). Reliability coefficients for the seven scales ranged from a low of .58 for the program administration scale to a high of .86 on the scale concerning teacher's perceptions toward the change process. It was recognized that the program administration scale was low (Mehrens & Lehmann, 1973). However, it was determined conceptually that all items in this scale were measures of one perception related to program administration, and the scale was left as originally constructed.

The second part of the questionnaire was designed to collect data on personal and situational characteristics (e.g., age, sex, degrees held, number of years teaching, size of program). The final portion of the survey instrument consisted of the following two items and response options:

1. If I had MY choice to employ the curriculum which is best suited for my program and community ("free choice" decision), beyond the 1987-88 school year, I would: (a) Continue offering the same curriculum as in the past, (b) Adopt the new curriculum on a limited basis, or (c) Adopt the new curriculum totally.

2. In my agricultural science program during the 1987-88 school year, I plan to (actual decision): (a) Continue offering the same curriculum as in the past, (b) Adopt the new curriculum on a limited basis, or (c) Adopt the new curriculum totally.

The questionnaire was pilot-tested using a graduate class consisting of agricultural science teachers, vocational supervisors, and teachers from other vocational areas. This activity was used to identify items that might be misleading, evaluate clarity of the instructions provided, and to determine the time needed to complete the survey by respondents. While the teachers from other vocational areas were not able to complete the survey due to unfamilarity, they were able to provide valuable input concerning format, readability, and completeness of instructions.

Collection of the Data

Selected faculty members of the Department of Agricultural Education at Texas A&M University distributed to each teacher as he or she entered the meeting room, a questionnaire, with cover instructions, and a pencil. Jay Eudy, Director of Agricultural Education, Texas Education Agency, explained to the teachers the need for answering the questionnaires and that this was one opportunity for them to have input into the change process. Completed questionnaires were collected at the conclusion of the meeting as the teachers left the meeting room.

Analysis of the Data

Descriptive statistics were used for reporting characteristics of teachers, characteristics of their programs, and perceptions of teachers toward possible effects of curricular changes on various aspects of their programs. Pearson product moment correlation, multiple correlation, and point biserial correlation were used to determine relationships. Cramer's V was calculated to describe the relationship between personal choice to change/not change and actual decision to change/not change (Hays, 1973). Finally, to determine if relationships existed between perceptions, personal choice to change, and actual decision to change, discriminant analysis procedures (with multiple correlation) were employed (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975; Pedhazur, 1982).

FINDINGS

The "average" agricultural science teacher in the survey is profiled as:

1. being 37 years of age and male
2. having 12 years of teaching experience
3. having 9 years of tenure at his present school
4. being employed in his second teaching position
5. having 78 students (total) enrolled in agricultural science
6. having 17 female students enrolled in agricultural science
7. having had 3.5 years of high school agricultural science
8. having been an active FFA member for 4 years
9. holding a master's degree
10. teaching in a "3A" school (high school enrollment of 285 to 714 students)
11. teaching in a community of 2,500 to 10,000 people
12. teaching in a program emphasizing production agriculture and perhaps agricultural mechanics or cooperative education in agriculture.

Table 1 is used to report teacher perceptions toward effects of the new curriculum on various components of programs of agricultural science. The respondents perceived the effects of the new curriculum to be positive for enrollment, non-vocationally oriented students, and inservice education. They were neutral to slightly positive concerning effects on the FFA and toward the manner in which the change had been brought about. Teachers expressed negative feelings toward the new curriculum for its effects on SOEP and program administration.

Insert Table 1 Here

Correlations between personal characteristics of teachers and teacher perceptions toward areas of the agricultural science curriculum that may be affected by the proposed changes are reported in Table 2. Also, the perceptions of teachers toward the manner in which the change in the curriculum was made were examined.

Insert Table 2 Here

Although not all correlations were statistically significant at the .05 level, there were some definite "trends." Some of the major "trends" concerning relationships between teacher characteristics and perceptions were as follows:

1. Experience (age, years of teaching, and tenure at present school) was negatively related ($p<.05$) to teacher perceptions of effects on enrollment, SOEP, and FFA. As age, years of teaching, and tenure increased, perceptions became more negative toward the proposed changes. However, a positive relationship existed between "tenure variables" and perceptions toward inservice needs resulting from the change.

2. The number of schools in which the teacher had worked was inversely related to all six scales, with significant negative correlations ($p<.05$) existing for number of schools and the perceptions concerning SOEP, FFA, and the change process. The more schools at which the teacher had taught, the more negative were his/her perceptions toward the curricular changes being proposed.

3. Years spent in vocational agriculture as a student and years spent as an active member of the FFA were negatively related to teacher perceptions. The more time spent as a student in vocational agriculture and as a member of FFA, the more negative were the perceptions of the teacher.

The relationships between level of education and teachers' perceptions of the effects of change were inconclusive. That is, there was little evidence to suggest that the educational level of teachers was a major influencing factor in how teachers perceived the changes in curriculum.

Correlations between program characteristics and teacher perceptions toward areas of the agricultural science curriculum that may be affected by the proposed changes are reported in Table 3. Also, the perceptions of teachers toward the manner in which the change in the curriculum was made were examined.

Insert Table 3 Here

Although not all correlations were statistically significant at the .05 level, one major "trend" was observed. As increases occurred in the total number of students and number of females enrolled in the program, and in the size of school and community in which the program was located, the more positive were the teacher's perceptions.

Teachers were asked to respond to two questions concerning their ultimate adoption or rejection of the new curriculum. The first question concerned what they would do, given their choice, concerning adoption of the new curriculum. Table 4 contains a summary of responses to this question (See column totals).

Insert Table 4 Here

Of the teachers who responded to this question (N=784), 83.6 percent stated that, given the choice, they would make some changes in their current programs. These changes would come about by either a partial or complete adoption of the new curriculum being proposed for Texas. Only 16.3 percent said that they would choose to remain with the same curriculum, if given a choice. This would seem to indicate that teachers in Texas do in fact recognize the need for change in their

current programs. Commerts by those stating that they would make changes usually cited declining enrollment and out-of-date program emphasis as the major reasons why they would accept the new curriculum. Those who stated that they would "remain the same" felt that the current program was fine and served the needs of their community and students. An "if it ain't broke, don't fix it" attitude prevailed in the comments concerning their choice not to adopt the new curriculum.

The second question concerned what the teachers would actually be doing concerning curriculum for the 1987-88 school year. A summary of responses for that question is also contained in Table 4 (See row totals). Of the teachers responding to this question, over one-half (n= 464, 59.2%) of the teachers indicated that they would adopt the new curriculum in part or completely for the 1987-88 school year. Next, the "upper left to lower right" diagonal depicts the number of teachers whose actual decision to change/not change their programs was in congruence with what they would do given their "free choice." On the other hand, other cells (outside the diagonal) show the numbers of teachers, whose decisions were incongruent. Cramer's V of .40 indicated a moderate relationship between "actual decision" and "free choice" decision. Many of the teachers who indicated that they would prefer to change, but were remaining the same for the 1987-88 school year, gave the following reasons: (a) lack of information that new curriculum could be adopted, (b) schedules were already set for upcoming year, or (c) new curriculum had not been approved officially by the State Board of Education. Those teachers who said that they would not change if given their choice, but who indicated in this question that they were indeed making changes for the 1987-88 school year, cited pressure from their administration to change as the primary reason.

Discriminant analysis was used to determine the relationships between perceptions and the respondents' "free choice" concerning the new curriculum and between perceptions and their actual decisions about the new curriculum for the 1987-88 school year. Table 5 contains information regarding the relationships between perceptions of teachers and the respondents' "free choice" to adopt or reject the new curriculum.

Insert Table 5 Here

The perceptions of individuals toward the "change process" was the best predictor of their choice to keep the same curriculum, adopt the new curriculum partially, or adopt the new curriculum completely (R=.59). Other perceptions that were highly predictive of respondents' choice were: effect on enrollment (R=.53), effect on FFA (R=.50), effect on program administration (R=.43), and effect on SOEP (R=.38).

The second question concerned what respondents were actually going to do concerning the new curriculum for the 1987-88 school year. Relationships between perceptions regarding the new curriculum and teachers' actual decisions concerning the curriculum to be employed during the 1987-88 school year were examined. Table 6 contains this information.

Insert Table 6 Here

As was the case with the question concerning "free choice," the best indicator of what the teacher was actually going to do for the 1987-88 school year came from their perceptions of the "change process" (R=.34). Other perceptions which were predictive of the actual decision to remain with the present curriculum, adopt the new curriculum partially, or adopt the new curriculum completely for the 1987-88 school year were those concerning the following: enrollment (R=.31),

program administration (R=.25), FFA (R=.23), SOEP (R=.21), and non-vocationally oriented students (R=.15).

CONCLUSIONS AND RECOMMENDATIONS

Following are the conclusions of this study:

1. The experience of the teacher was negatively related to teachers' perceptions of the effects of the new curriculum on enrollment, SOEP, and FFA.

2. The number of schools in which the teachers had worked was negatively related to teachers' perceptions toward all aspects of the proposed curricular change.

3. A background as a student in vocational agriculture or as a member of the FFA was negatively related to teachers' perceptions toward the new curriculum.

4. The size of the school in which the teachers taught, size of community in which the school was located, the number of students in the program, and number of females in the program were factors positively related to teachers' perceptions.

5. Teacher's perceptions toward the "change process" (need for the change, manner in which the change was managed, amount of teacher input into the change, etc.) was the single best predictor of the teacher's "free choice" and "actual decision" concerning adoption of the change.

6. "Free choice" and "actual decision" were related; however, only a relatively small portion (about 16%) of the variance in "actual decision" was explained by "free choice" decision. In other words, factors other than the teachers' own choices were more important in determining their actual decision concerning the 1987-88 curriculum in agricultural science.

Based on the findings of this study, the following recommendations are made concerning the implementation of the new curriculum:

1. Further effort needs to be exerted by staff of the Texas Education Agency to gain support from those teachers whom the survey identified as having negative

perceptions of the new curriculum. These efforts should attempt to target the following groups: (a) teachers who are more experienced (older, more years of teaching experience, longer period of tenure in present school, or have taught in several different school systems); and (b) teachers who have programs located in small schools and small communities.

2. Teacher input into the change process should be increased whenever possible. Many of the teachers who opposed the changes felt that there had been little opportunity for teacher input into the new curriculum, and that these changes were being forced on them.

3. The perceptions of the respondents toward the "change process," not their perceptions toward effects on the program, were the single best indicator of what their "free choice" and "actual decision" concerning the new curriculum would be. That is, those teachers who were more positive about the manner in which the change was implemented were more likely to support the new curriculum, regardless of how they perceived their programs might be affected. Therefore, regardless of the nature of any change being considered, those affected by the change should be included in the planning and implementation of that change.

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Table 1

Summary of Perceptions of Teachers Toward Effects of the New Curriculum on Various Components of Programs of Agricultural Science

Scale	N	Mean*	Standard Deviation
Perceived effects of curricular changes on:			
Enrollment	917	3.38	.68
Non-Vocationally Oriented Students	914	3.91	.82
SOEP	903	2.53	.71
Program Administration	906	2.81	.62
Inservice Education	847	3.60	.60
FFA	855	3.18	.70
Change Process	853	3.19	.67

* 1=Strongly Negative, 2=Negative, 3=Neutral, 4=Positive, and 5=Strongly Positive

Table 2

Correlation Between Teachers' Personal

Characteristics and Perceptions Toward Curriculum Change

(Pearson Correlation Coefficients)

Scales \ Variable	Age	Number of Schools	Years of Teaching	Tenure	Years of Vo Ag	Years in FFA	Sex	Education Level Attained
Enrollment	-.09**	-.05*	-.10**	-.08*	-.06*	-.06*	.08**	.02
Non Vocational	.03	-.03	.02	-.002	-.03	-.02	-.01	.07*
SOEP	-.09**	-.07*	-.12**	-.13**	.01	.02	.05	-.05
Program Administration	-.02	-.02	-.05*	-.05*	-.05*	-.04	.05	-.05
Inservice Education	.05*	-.04	.05*	.09**	-.05	-.05*	.01	.11**
FFA	-.11**	-.08*	-.12**	-.07*	-.04	-.03	.05	-.04
Change Process	.02	-.08*	-.01	.03	-.07*	-.05*	.03	-.01

* indicates significance at the .05 level
** indicates significance at the .01 level

Table 3

Correlation Between Program Characteristics

and Teachers' Perceptions Toward Curriculum Change

(Pearson Correlation Coefficients)

Scales \ Variable	Number of Students	Number of Females	Size of School	Size of Community
Enrollment	.14**	.11**	.13**	.11**
Non Vocational	.07*	.07*	.06*	.01
SOEP	.04	.004	.04	.05
Program Administration	.07*	.05	.06*	.06*
Inservice Education	.06*	.06*	.08**	.07*
FFA	.13**	.13**	.10**	.10**
Change Process	.12**	.08*	.11**	.10**

* indicates significance at the .05 level
** indicates significance at the .01 level

Table 4

Crosstabulation of Questions Concerning

"Free Choice" and "Actual Decision"

Actual Decision	Free Choice* 1	2	3	Row Total
1) Keep present curriculum	100	155	65	320 (40.8%)
2) Adopt new curriculum partially	26	249	89	364 (46.4%)
3) Adopt new curriculum completely	2	11	87	100 (12.8%)
Column Total	128 (16.3%)	415 (52.9%)	241 (30.7%)	784 (100.0%)

Cramer's V statistic = .40**

* 1 = Keep present curriculum, 2 = Adopt new curriculum completely, and 3 = Adopt new curriculum completely

** Indicates significance at the .01 level.

Table 5

Relationships Between Perceptions of

Teachers and Their "Free Choice" Concerning Curriculum

Choice	N	Scale Mean*	S.D.	Multiple R F Prob.
		Effect on Enrollment		
Keep present curriculum	130	2.78	0.79	R = .53
Adopt new curriculum partially	403	3.37	0.59	
Adopt new curriculum totally	227	3.73	0.54	<.01
		Effect on Non-Vocational Students		
Keep present curriculum	130	4.00	0.99	R = .10
Adopt new curriculum partially	403	3.94	0.80	
Adopt new curriculum totally	227	3.81	0.81	.08
		Effect on SOEP		
Keep present curriculum	130	2.20	0.74	R = .38
Adopt new curriculum partially	403	2.46	0.67	
Adopt new curriculum totally	227	2.85	0.69	<.01
		Effect on Program Administration		
Keep present curriculum	130	2.45	0.67	R = .43
Adopt new curriculum partially	403	2.75	0.54	
Adopt new curriculum totally	227	3.11	0.61	<.01
		Effect on Inservice Education		
Keep present curriculum	130	3.49	0.75	R = .11
Adopt new curriculum partially	403	3.63	0.52	
Adopt new curriculum totally	227	3.62	0.61	.05
		Effect on FFA		
Keep present curriculum	130	2.62	0.77	R = .50
Adopt new curriculum partially	403	3.16	0.61	
Adopt new curriculum totally	227	3.53	0.60	<.01
		Perceptions Toward Change Process		
Keep present curriculum	130	2.58	0.71	R = .59
Adopt new curriculum partially	403	3.14	0.57	
Adopt new curriculum totally	227	3.61	0.51	<.01

* 1=Strongly Negative, 2=Negative, 3=Neutral, 4=Positive, and 5=Strongly Positive

Table 6

Relationships Between Perceptions of Teachers and

Their "Actual Decision" Concerning Curriculum for 1987-88

Choice	N	Scale Mean*	S.D.	Multiple R F Prob.
		Effect on Enrollment		
Keep present curriculum	297	3.22	0.75	R = .31
Adopt new curriculum partially	349	3.42	0.63	
Adopt new curriculum totally	95	3.78	0.55	<.01
		Effect on Non-Vocational Students		
Keep present curriculum	297	4.04	0.84	R = .15
Adopt new curriculum partially	349	3.82	0.81	
Adopt new curriculum totally	95	3.92	0.87	<.01
		Effect on SOEP		
Keep present curriculum	297	2.38	0.71	R = .21
Adopt new curriculum partially	349	2.59	0.69	
Adopt new curriculum totally	95	2.73	0.77	<.01
		Effect on Program Administration		
Keep present curriculum	297	2.69	0.65	R = .25
Adopt new curriculum partially	349	2.82	0.57	
Adopt new curriculum totally	95	3.09	0.68	<.01
		Effect on Inservice Education		
Keep present curriculum	297	3.61	0.66	R = .05
Adopt new curriculum partially	349	3.62	0.54	
Adopt new curriculum totally	95	3.54	0.61	.51
		Effect on FFA		
Keep present curriculum	297	3.04	0.74	R = .23
Adopt new curriculum partially	349	3.21	0.67	
Adopt new curriculum totally	95	3.45	0.66	<.01
		Perceptions Toward Change Process		
Keep present curriculum	297	2.98	0.70	R = .34
Adopt new curriculum partially	349	3.26	0.61	
Adopt new curriculum totally	95	3.54	0.60	<.01

* 1=Strongly Negative, 2=Negative, 3=Neutral, 4=Positive, and 5=Strongly Positive